

Arizona Department of Water Resources

**GWSI Quick Reference User's Guide for
GWSI Web Application**

2010



INTRODUCTION

This User's Guide is a reference on how to get started with the Groundwater Sites Inventory (GWSI) Web Application. There are links provided throughout the document to provide further documentation of the application. For a more complete description of the application please refer to <https://gisweb.azwater.gov/gwsi/2009AHSPaper.pdf>. For further information on GWSI wells please visit: <http://www.azwater.gov/AzDWR/Hydrology/default.htm>.

In order to use this application open your internet browser to <https://gisweb.azwater.gov/waterresourcedata/GWSI.aspx>. From this webpage you will enter the application by one of two methods: **Search Wizard** or **Map**. Both methods will provide registered well information. All of the pages within this application are interlinked.

The user guide will explain the four main pages of the application:

1. [Search Wizard](#)
2. [Map](#)
3. [Hydrograph](#)
4. [Well Details](#)

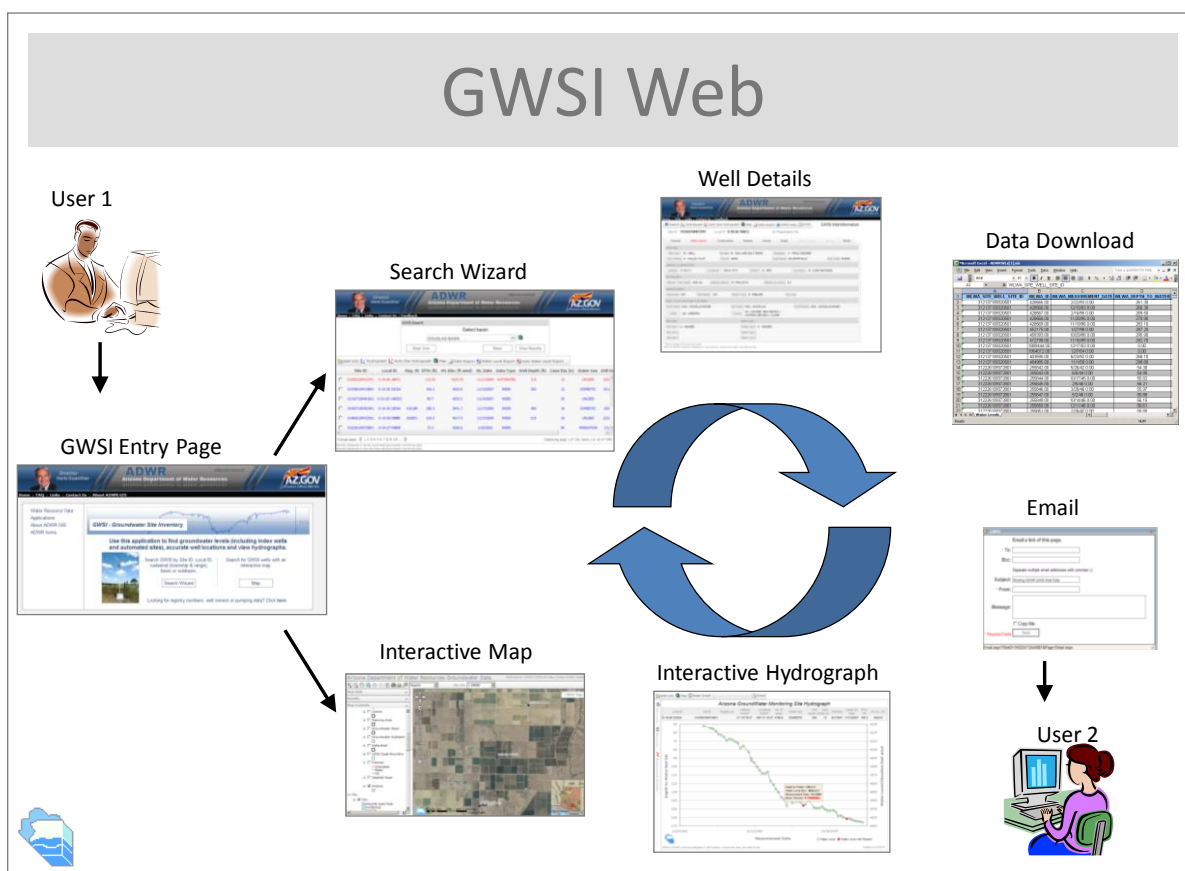


Figure 1. Diagram displaying the different parts of the GWSI Web Application

SEARCH WIZARD

The search wizard walks the user through a short series of questions to help narrow the search for GWSI records of interest. Choose to search by individual [well identification numbers](#) or by [spatial filters](#) such as basin, subbasin, cadastral, or USGS topo quad.

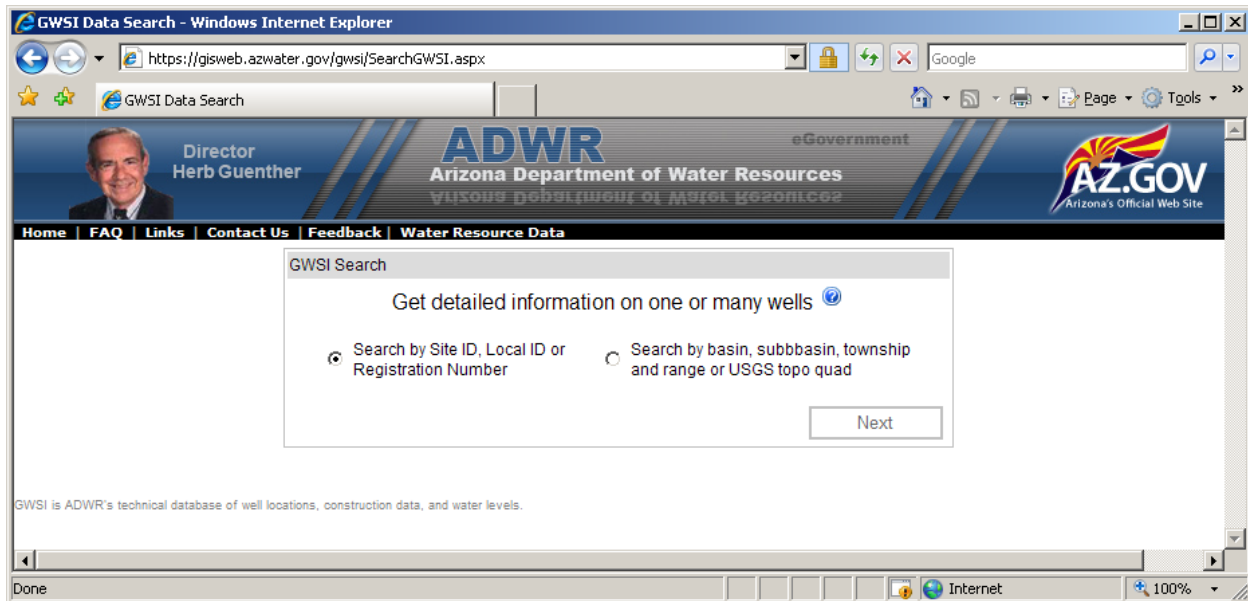


Figure 2. Search Wizard

At the end of the questions, click the View Results button. Then a results table will show up below the last question. The results table is a summary of information for each GWSI site. The records shown in red are [automated sites](#), blue records are [index wells](#) and the rest are other GWSI records. There is the option to [sort your results](#) in the table, to help get to the data of interest quicker. For example, if you are looking for wells with recent water levels, you could sort the water level date (WL Date) field.

When the results table is displayed, a toolbar is also displayed just above the results table. This toolbar provides you different options to view more information. The toolbar buttons are: Well Info, Hydrograph, Auto Site Hydrograph, Map, Data Export, Water Level Export, and Auto Water Level Export. To use the Well Info button, you must select a record in the results table (by clicking anywhere on that record's row), and then click the Well Info button. This action opens a new well information page that displays all the information in the GWSI database for that particular well. To view a wells hydrograph, click the well record of interest, then click the Hydrograph button. The Map button opens a new window with the GWSI interactive map, which is zoomed into the area of the well you selected before clicking the Map button. The Data Export button will export your current search results to an XML file, which is formatted in a way that allows you to open it in Microsoft Excel. The GWSI site's latitude and longitude (in NAD 27, Zone 12) are included in this data export, so that you can incorporate these data in your own mapping software. The Water Level Export button downloads all of the standard water level measurements from your search results to Microsoft Excel. And the Auto Water

Level Export button downloads all of the automated sites water levels within your search results.

GWSI Search

Select basin
DETRITAL VALLEY BASIN

Start Over Back View Results

Well Info Hydrograph Auto Site Hydrograph Map Data Export Water Level Export Auto Water Level Export

Site ID	Local ID	Reg. ID	DTW (ft)	WL Elev (ft amsl)	WL Date	Data Type	Well Depth (ft)	Case Dia (in)	Water Use	Drill Date	Lat NAD27	Lon NAD27
<input type="checkbox"/> 354208114282801	B-27-21 25ACA1	584114	336.55	2098.45	6/6/2008	AUTOMATED	1500	12.75	UNUSED	5/5/2001	35.702222	114.4750
<input type="checkbox"/> 354027114273101	B-26-20 06ACB	505703	461.25	2040.74	12/1/2009	AUTOMATED	537	8.60	UNUSED	7/27/1983	35.671794	114.455964
<input type="checkbox"/> 355155114315101	B-29-21 28DDD	545711	72.3	1927.7	10/27/2009	INDEX	400	7	UNUSED	8/19/1994	35.865722	114.530917
<input type="checkbox"/> 360105114281101	B-30-20 06CAD UNSURV	629128	57.3	1281.7	10/27/2009	INDEX	185	8	UNUSED	1/1/1957	36.014833	114.470222
<input type="checkbox"/> 354838114323201	B-28-21 20ADB	505400	303.4	2043.6	10/27/2009	INDEX	385	6	UNUSED	9/25/1980	35.803417	114.543028
<input type="checkbox"/> 354402114194001	B-27-19 17AAA	642196	623.2	3016.8	10/27/2009	INDEX	750	8	PUBLIC SUPPLY		35.733861	114.327222

Change page: 1 2 3 4 5 6 7 8 9 10 ...

Displaying page 1 of 14, items 1 to 10 of 134.

Records displayed in red are automated groundwater monitoring sites.
Records displayed in blue are index well groundwater monitoring sites.

GWSI is ADWR's technical database of well locations, construction data, and water levels.

Figure 3. Results Table displaying automated sites in red and index wells in blue

For more help on the data provided in the Results:

http://gisweb.azwater.gov/GWSI/GWSI_BOOK2_1.pdf

For more help on the Search Wizard:

<http://gisweb.azwater.gov/GWSI/FAQ.aspx>

MAP

The map has tools to navigate to GWSI wells within a desired area. The navigation tools are highlighted below in yellow. Use them to move around the map and view wells in an area.

When the map scale is below 1:150,000, aerial imagery will become the default background and well labels will appear. Also at or below 1:40,000 map scale, a map tip will appear when the mouse hovers over a well. Click the map tip and a summary of water level information for that well will appear. Use the Hydrograph or Well Info hyperlinks to view those features of the well.

For more help on how to use the map:

<https://gisweb.azwater.gov/GWSI/MapHelp.aspx>

For more help on the data provided in the Results:

http://gisweb.azwater.gov/GWSI/GWSI_BOOK2_1.pdf

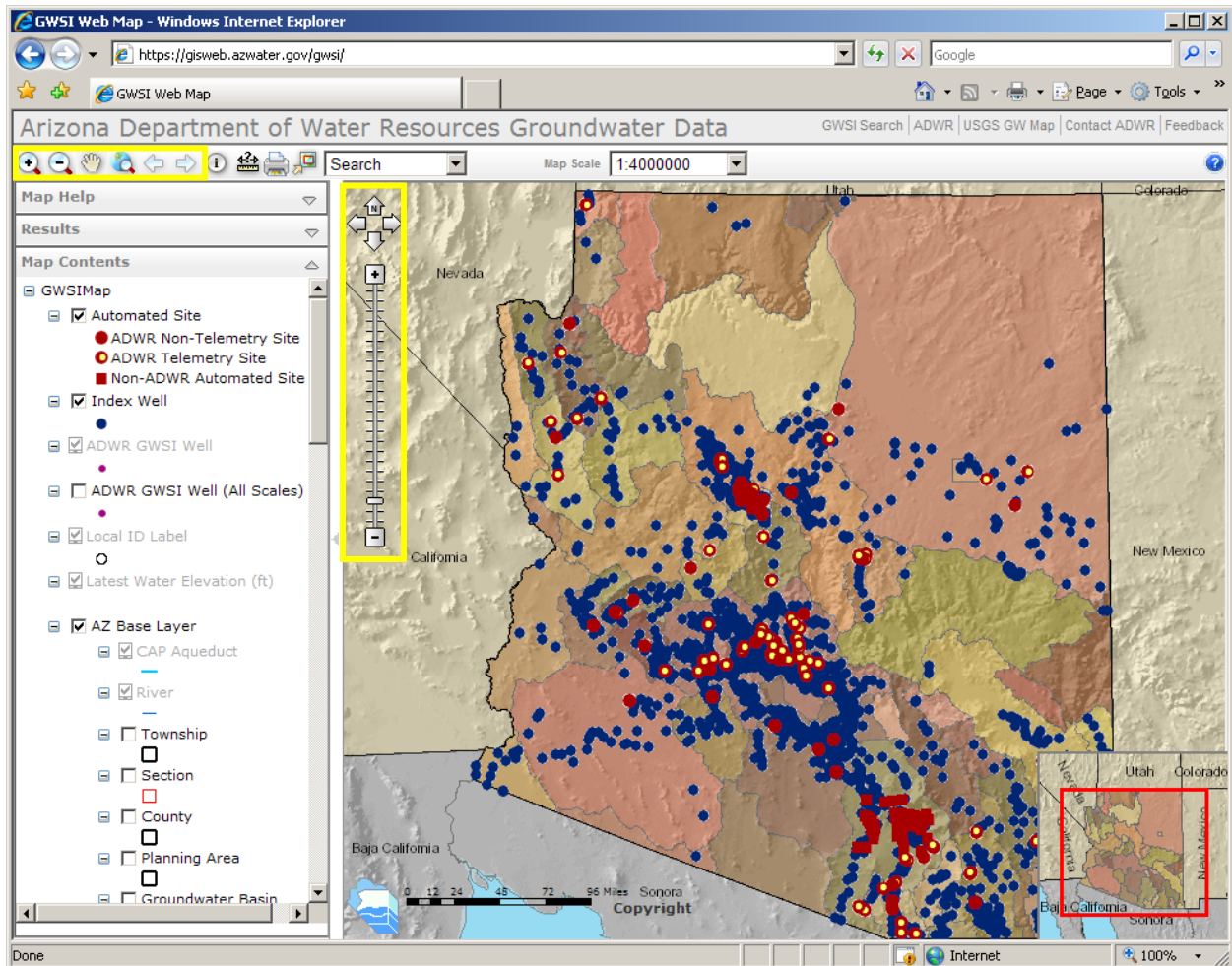


Figure 4. Map's navigation tools in yellow

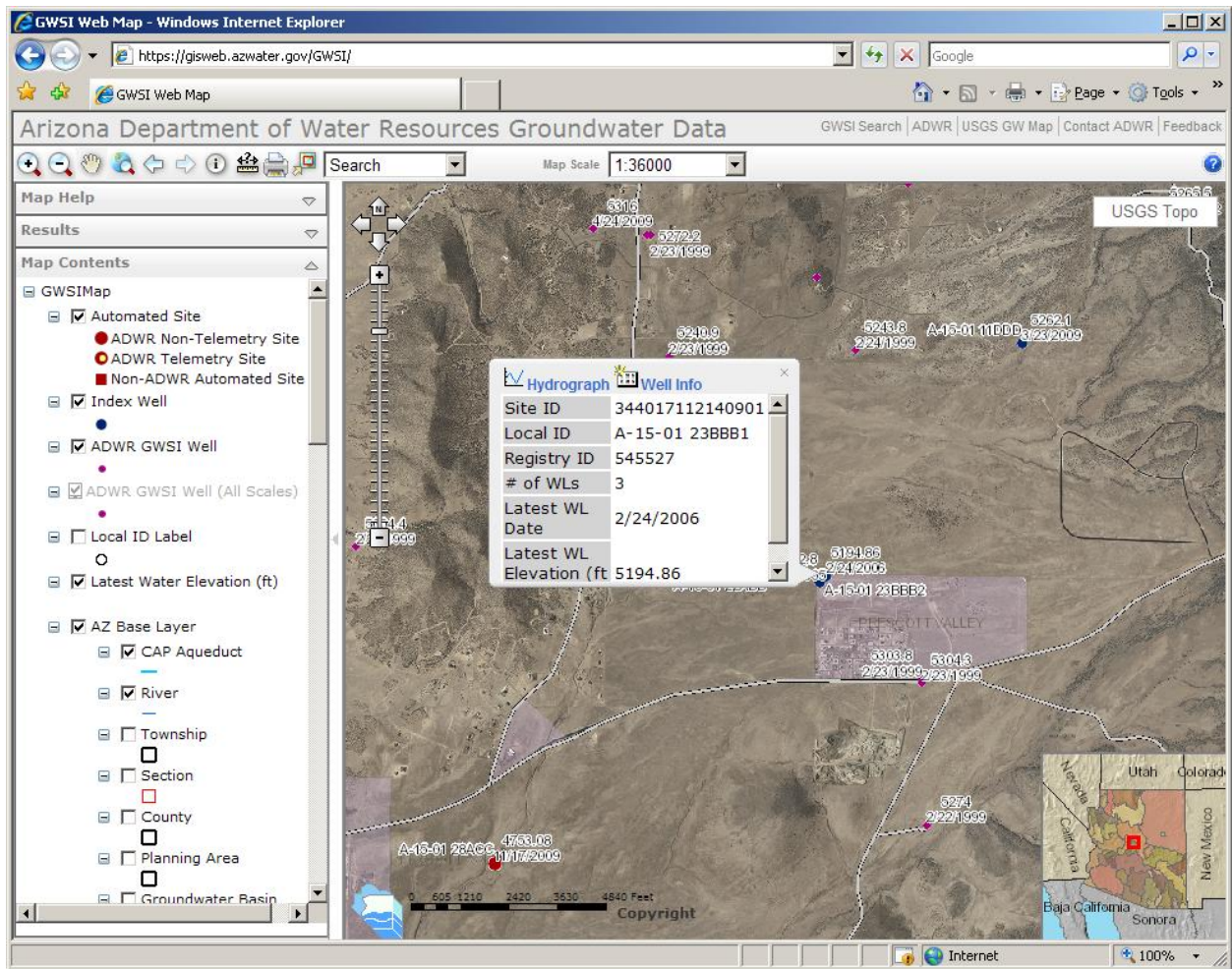


Figure 5. Map Tips

HYDROGRAPH

The hydrograph and automated hydrograph allow the user to graphically view water levels for individual wells. The Hydrograph page displays only the manual water level measurements for the well. The Auto Site Hydrograph page displays both the manual and automated water level measurements. Both hydrograph pages allow the user to set the X and Y axis and remove water level remarks with tools to the left of the hydrograph. As the mouse hovers over a water level measurement, a pop-up window appears displaying a summary of water level information. The URL of this page is unique to each well and can be shared through Email by using the Email button or copying and placing the URL into any document.

For more information on how to use the hydrograph:

<https://gisweb.azwater.gov/gwsi/2009AHSPaper.pdf>.

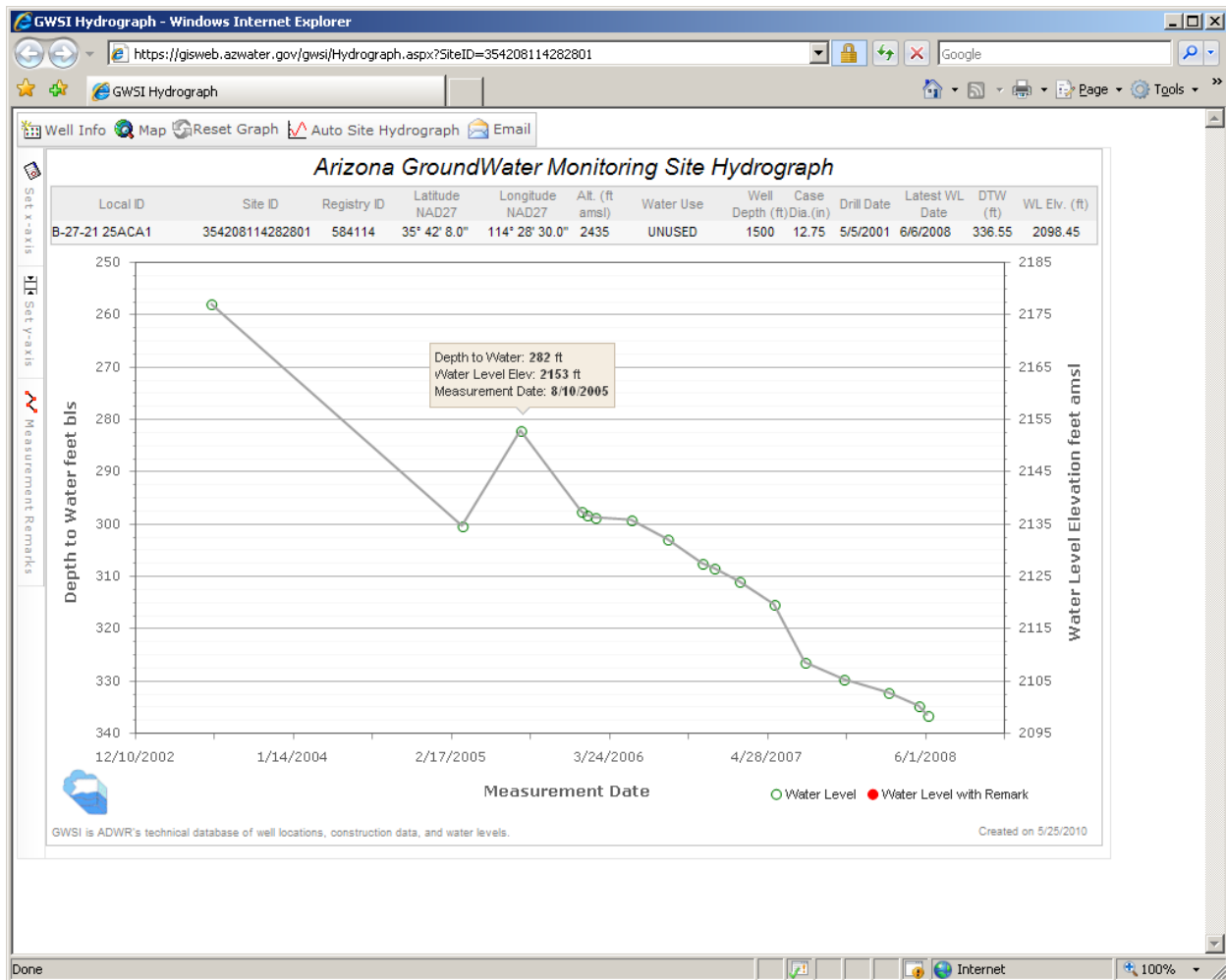


Figure 6. Hydrograph with mouse over water level information

WELL DETAILS

After a search from the Search Wizard has been completed, a well's information can be viewed. First select the well in the grid and then click the **Well Info** button above the grid. A new web page will open displaying all of the well's information.

This information is throughout several tabs: General, Water Levels, Construction, Remark, Owner, Pump, Water Quality, Spring, and Photo. All of the data provided can be exported to MS Excel with the **Data Export** button located in the toolbar on the top of the page. The URL of this page is unique to each well and can be shared through Email by using the Email button or copying and placing the URL into any document.

GWSI Site Detail - Windows Internet Explorer

URL: <https://gisweb.azwater.gov/gws/Detail.aspx?SiteID=354208114282801>

ADWR Arizona Department of Water Resources

Director Herb Guenther

AZ.GOV Arizona's Official Web Site

Home | FAQ | Links | Contact Us | Feedback | Water Resource Data

Search | Hydrograph | Auto Site Hydrograph | Map | Data Export | GWSI Help | Email

GWSI Well Information

Site ID: **354208114282801** Local ID: **B-27-21 25ACA1** 55 Registration No. **584114**

General | Water Levels* | Construction | Remark | Owner | Pump | Water Quality | Spring | Photo

GWSI Site

Site Type	W - WELL	Meridian	G - GILA AND SALT RIVER	Reliability	C - FIELD CHECKED
Topo Setting	V - VALLEY FLAT	Source	ADWR	Quad Name	WHITE HILLS WEST
Map Scale: 024000					
Latitude, Longitude DMS					
Latitude	35 42 8	Longitude	114 28 30	Method	G - GPS
		Accuracy	S - SECOND		
Site Elevation					
Altitude - Feet AMSL	2435	Altitude Method	M - MAP	Altitude Accuracy	10
Well Information					
Hole Depth	1500	Well Depth	1500	Depth Code	D - DRILLER
		Geo unit			
Basin, County and State Information					
USGS Basin	CHI - COLORADO RIVER, HOOVER/IMPERIAL DAMS	Sub Basin	DET - DETRITAL VALLEY	ADWR Basin	DET - DETRITAL VALLEY BASIN
State	AZ - ARIZONA	County	15 - MOHAVE		
Site Uses			Water Uses		
Site Use 1	U - UNUSED	Water Use 1	U - UNUSED		
Site Use 2	O - OBSERVATION	Water Use 2			
Site Use 3		Water Use 3			

* Automated Groundwater Site
GWSI is ADWR's technical database of well locations, construction data, and water levels.

Figure 7. Well Detail's page